

Abstract of the Disclosure

A plasmid-based vaccine is provided herein based on the combination of DNA segments coding for one or more B cell epitopes of CETP and one or more broad range helper T cell epitopes. Administration of the plasmids as a vaccine to a vertebrate subject provides an immune response to the subject's endogenous CETP and modulation of CETP activity, leading to prevention or reversal of various manifestations of heart disease. The vaccines provide an advantageous strategy for the prevention or treatment of atherosclerosis.